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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/811,342	03/16/2001	Robert H. Wills	10964-037002 / Case 664	7728

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EXAMINER

KIM, PAUL L

ART UNIT

PAPER NUMBER

2857

DATE MAILED: 01/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/811,342

Applicant(s)

WILLS, ROBERT H.

Examiner

Paul L Kim

Art Unit

2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 November 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-26 and 28-41 is/are rejected.
- 7) ☒ Claim(s) 27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. Claims 30-33 and 36-39 are rejected under 35 U.S.C. 102(e) as being anticipated by Peckinpaugh.

With regard to claims 30 and 36, Peckinpaugh teaches a method and apparatus of controlling power supplied to a utility network comprising: detecting a trend in voltage on the utility network (col. 2, lines 23-25) and controlling the power supplied to the utility network in accordance with the trend (col. 2, lines 25-27).

With regard to claims 31 and 37, Peckinpaugh teaches the trend comprising a change in voltage on the utility network (col. 2, lines 43-46).

With regard to claims 32 and 38, Peckinpaugh teaches controlling comprising changing a supply of voltage to the utility network in a same direction as the change in voltage on the utility network (col. 2, lines 36-38).

With regard to claims 33 and 39, Peckinpaugh teaches the change in voltage comprising at least a change in voltage level and a change in voltage frequency (fig. 5).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 21-26, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee in view of Peckinpaugh.

With regard to claims 21, 22, and 29, Lee teaches a television tuning apparatus that comprises a detector to detect a characteristic of power on a tuner (col. 6, lines 25-27), an accelerator to measure a change in the characteristic, such as voltage (col. 6, lines 27-30), and circuitry to control the power supplied to the tuner based on characteristic changes (col. 6, lines 31-32).

Lee however does not teach the accelerator measuring characteristic changes of a grid line on a utility network. Peckinpaugh teaches a power generation system that has circuit regulators that alter power to circuit voltage (abstract) on a grid line (fig. 1, part 15). Since Lee and Peckinpaugh are both within the art of controlling power supplied to electric circuitry based on measured change characteristics, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Lee so that the accelerator measures changes within a power distribution system instead of a tuning system, as taught by Peckinpaugh, so as to be able to have more control over a power system during times of power surges or suppressions.

With regard to claim 23, Lee teaches the characteristic comprises a direction and amount of voltage (col. 8, lines 28-35).

With regard to claim 24, Lee teaches the characteristic comprising signal frequency (col. 6, lines 25-30).

With regard to claim 25, Lee teaches the circuitry controlling the power by changing the voltage in a same direction as the change measured by the accelerator (col. 6, lines 29-33).

With regard to claim 26, Lee teaches the detector comprising a voltage detector to detect voltage on a grid line and the system further comprising a frequency detector to detect a frequency of the voltage on the line, the circuitry controlling the power supplied to the utility network based on outputs of the frequency and voltage detector (col. 7, lines 54+).

5. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee in view of Eguchi et al.

With regard to claim 28, Lee does not teach a zero crossing detector. Eguchi et al teaches a zero crossing detector for a power supply system (col. 4, lines 8-14). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Lee so that the tuning system includes a zero crossing detector, as taught by Eguchi et al, in order to detect power discontinuities within an electrical system.

6. Claims 34 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peckinpaugh in view of Eguchi et al.

With regard to claims 34 and 40, Peckinpaugh does not teach the power source controlling the power supplied to the utility network in order to reduce islanding. Eguchi et al teaches a power system that controls the power supplied to a utility network in order to reduce an islanding condition (col. 5, lines 29-34). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Peckinpaugh, so that the power source includes an islanding reduction technique, as taught by Eguchi et al, in order to reduce power when power is not needed, such as during electrical shorts.

7. Claims 35 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peckinpaugh in view of Lee.

With regard to claims 35 and 41, Peckinpaugh does not teach power being controlled by a gain accelerator. Lee teaches a gain accelerator for power of a TV tuning system (col. 6, lines 25-32). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Peckinpaugh, so that power is controlled by a gain accelerator, as taught by Lee, in order to have better control over voltage output.

Allowable Subject Matter

8. Claim 27 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art of record does not teach a phase detector to detect a phase of a voltage on an electric line in conjunction with an accelerator to measure change of a power characteristic.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Rabon et al teaches a power distribution regulation system that uses trend analysis.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Kim whose telephone number is 703-305-7468. The examiner can normally be reached on Monday-Thursdays 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on 703-308-1677. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-4440 for regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

PK
January 15, 2003


MARC S. HOFF
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800